

which comprises adding an alkenyl-containing polymer (I) to a living radical polymerization system or a living cationic polymerization system.

64 (Added). A process for producing an AB block copolymer, an ABA block copolymer or a multiblock copolymer,

which comprises adding an alkenyl-containing polymer (I) to a living radical polymerization system or a living cationic polymerization system,

*D<sup>2</sup>  
elected*  
wherein said polymer (I) has both said alkenyl group and an initiator group for the living radical polymerization or the living cation polymerization, and the number of said alkenyl group in said polymer (I) is identical with the number of said initiator group in said polymer (I).

#### REMARKS

Claims 33-64 are now in the application. Claims 33-35, 37-53, 56 and 62-64 are drawn to the elected invention. Claims 36, 54, 55 and 57-61 are drawn to non-elected invention and may be cancelled by the Examiner upon the allowance of the claims directed to the elected invention.

Claim 33 has been amended to recite "wherein said multiblock copolymer is obtained through the living radical polymerization or the living cationic polymerization using said polymer (I) having two alkenyl groups per molecule, and a bifunctional initiator."

New claim 63 corresponds to previous claim 33 and further recites the term ---linear--- before the term "multiblock." Support is found on the last formula on page 61.

*WJ*  
New claim 64 corresponds to previous claim 33 and further reciting the phrase ---wherein said polymer (I) has both said alkenyl group and an initiator group for the living radical polymerization or the living cation polymerization, and the number of said alkenyl group in said polymer (I) is identical with the number of said initiator group in said polymer (I)---. Support is found on page 55, lines 21-23 and page 59, lines 8-9 and lines 17-19.

The amendments to the claims and new claims do not introduce any new matter.

Claims 33-35, 37-53, 56 and 62 were rejected under 35 U.S.C. 102(e) as being anticipated over U.S. Patent 5,789,487 to Matyjaszewski et al. Matyjaszewski et al. do not anticipate the present invention.

The process as recited in amended claim 33 recites that the multiblock copolymer is obtained through the living radical polymerization or the living cationic polymerization using the polymer (I) having two alkenyl groups per molecule, and a bifunctional initiator.

Matyjaszewski et al. merely suggest that each macromolecule has one double bond and n X groups, where n equals the number of repeated units, i.e., n exceeds 2 (Scheme 5; col. 22, lines 37-39), and that an acrylic hyperbranched polymer of the type obtained by homopolymerization of 2- (2-bromopropionoxy) ethyl acrylate has n halogen atoms per macromolecule (col. 23, lines 38-41).

Matyjaszewski et al. do not disclose or suggest that the polymer (I) has two alkenyl groups per molecule. Further, Matyjaszewski et al. fail to disclose or suggest a bifunctional initiator, which is used for producing the multiblock copolymer.

Therefore, amended claim 33 is not anticipated by or obvious over Matyjaszewski et al.

The process of newly added claim 63 relates to a process for producing an AB block copolymer, an ABA block polymer or a linear multiblock copolymer.

As the Examiner alleges, Matyjaszewski et al. merely disclose a method for producing non-linear multiblock copolymers.

Matyjaszewski et al. do not disclose or suggest a process for producing an AB block copolymer, an ABA blockcopolymer or a linear multiblock copolymer.

Therefore, newly added claim 63 is not anticipated by or obvious over Matyjaszewski et al.

The process of newly added claim 64 recites that polymer (I) has both said alkenyl group and an initiator group for the living radical polymerization or the living cation polymerization, and that the number of said alkenyl group in polymer (I) is identical with the number of said initiator group in polymer (I).

Matyjaszewski et al. merely suggest macroinitiator having an alkenyl group and an initiator group, the number of which is much more than that of the alkenyl group.

Therefore, newly added claim 64 is not anticipated by or obvious over Matyjaszewski et al.

Matyjaszewski et al. do not anticipate the present invention. In particular, anticipation requires the disclosure, in a prior art reference, of each and every recitation as set forth in the claims. See *Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir. 1985), *Orthokinetics*,

*Inc. v. Safety Travel Chairs, Inc.*, 1 USPQ2d 1081 (Fed. Cir. 1986), and *Akzo N.V. v. U.S. International Trade Commissioner*, 1 USPQ2d 1241 (Fed. Cir. 1986).

There must be no difference between the claimed invention and reference disclosure for an anticipation rejection under 35 U.S.C. 102. See *Scripps Clinic and Research Foundation v. Genentech, Inc.*, 18 USPQ2d 1001 (CAFC 1991) and *Studiengesellschaft Kohle GmbH v. Dart Industries*, 220 USPQ 841 (CAFC 1984).

In view of the above, consideration and allowance are, therefore, respectfully solicited.

In the event the Examiner believes an interview might serve to advance the prosecution of this application in any way, the undersigned attorney is available at the telephone number noted below.

The Director is hereby authorized to charge any fees, or credit any overpayment, associated with this communication, including any extension fees, to CBLH Deposit Account No. 22-0185.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

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Respectfully submitted,

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**Version With Markings to Show Changes Made**

33 (Amended). A process for producing an AB block copolymer, an ABA block copolymer or a multiblock copolymer,

which comprises adding an alkenyl-containing polymer (I) to a living radical polymerization system or a living cationic polymerization system,

wherein said multiblock copolymer is obtained through the living radical polymerization or the living cationic polymerization using said polymer (I) having two alkenyl groups per molecule, and a bifunctional initiator.